## WHAT IS CLAIMED IS:

1. A nipple shield device for removing leukocytes from breast milk comprising:

a nipple shield having a base and a protrusion that is shaped to conform to a mammalian female areola and nipple, wherein said protrusion has one or more holes permitting intake of breast milk by an infant; and

a filter attached to the nipple shield at a location permitting removal of leukocytes from breast milk.

- 2. The nipple shield device according to claim 1, wherein said filter is attached inside of said protrusion.
- 3. The nipple shield device according to claim 1, wherein said filter is a leukocyte reduction filter.
- 4. The nipple shield device according to claim 1, wherein said filter is attached at a plurality of different locations along the protrusion to permit serial filtering of breast milk.
- 5. The nipple shield device according to claim 1, wherein said nipple shield is made of a flexible material.
- 6. The nipple shield device according to claim 5, wherein the flexible material is silicone or rubber.
- 7. A nipple device for removing leukocytes from breast milk comprising:

a nipple having a base and a protrusion, wherein said protrusion has one or more holes permitting intake of breast milk by an infant; and

a filter attached to the nipple at a location permitting removal of leukocytes from breast milk.

- 8. The nipple device according to claim 7, wherein said filter is attached inside of said protrusion.
- 9. The nipple device according to claim 7, wherein said filter is a leukocyte reduction filter.
- 10. The nipple device according to claim 7, wherein said filter is attached at a plurality of different locations along the protrusion to permit serial filtering of breast milk.
- 11. The nipple device according to claim 7, wherein said nipple is made of a flexible material.
- 12. The nipple device according to claim 11, wherein the flexible material is silicone or rubber.
- 13. A nursing bottle on to which the nipple device according to claim 7 is fitted.
  - 14. A method of removing leukocytes from breast milk comprising: filtering breast milk with a filter that removes leukocytes.
- 15. The method according to claim 14, wherein said filter is part of a nipple shield device for breastfeeding an infant, said nipple shield device comprising:

a nipple shield having a base and a protrusion that is shaped to conform to a mammalian female areola and nipple, wherein said protrusion has one or more holes permitting intake of breast milk by an infant, and

- a filter attached to the nipple shield at a location permitting removal of leukocytes from breast milk.
- 16. The method according to claim 15, wherein said filter is attached inside of said protrusion.

- 17. The method according to claim 15, wherein said filter is a leukocyte reduction filter.
- 18. The method according to claim 15, wherein said filter is attached at a plurality of different locations along the protrusion to permit serial filtering of breast milk.
- 19. The method according to claim 15, wherein said nipple shield is made of a flexible material.
- 20. The method according to claim 19, wherein the flexible material is silicone or rubber.
- 21. The method according to claim 14, wherein said filter is part of a nipple device that is fitted onto a nursing bottle, said nipple device comprising:

  a nipple having a base and a protrusion, wherein said protrusion has one or more holes permitting intake of breast milk by an infant, and

  a filter attached to the nipple at a location permitting removal of leukocytes from breast milk.
- 22. The method according to claim 21, wherein said filter is attached inside of said protrusion.
- 23. The method according to claim 21, wherein said filter is a leukocyte reduction filter.
- 24. The method according to claim 21, wherein said filter is attached at a plurality of different locations along the protrusion to permit serial filtering of breast milk.
- 25. The method according to claim 21, wherein said nipple is made of a flexible material.

26. The method according to claim 25, wherein the flexible material is silicone or rubber.